

ABSTRACT OF THE DISCLOSURE

A semiconductor device includes 1) a conductive pipe including an inner surface forming an inner space shaping a path of an insulative cooling refrigerant liquid and an outer surface including a plane portion partially formed thereof, 2) a power semiconductor element fixed onto the plane portion of the conductive pipe through a bonding layer such as solder, 3) a first external connecting terminal including an inner lead part including a tip portion bonded onto the plane portion of the conductive pipe and an outer lead part continuous with the inner lead part, 4) a second external connecting terminal which is in the state of floating above the outer surface, and 5) a mold resin covering the whole surface of the power semiconductor element, the whole of the inner lead parts of the external connecting terminals, and the whole of the outer surface covering a central portion of the conductive pipe.